

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 11/731, 875  
Source: IFWO  
Date Processed by STIC: 04/10/2007

# ***ENTERED***



IFWO

## RAW SEQUENCE LISTING

DATE: 04/10/2007

PATENT APPLICATION: US/11/731,875

TIME: 10:35:18

Input Set : F:\DHARMA\_2100-US11\_CRF.TXT

Output Set: N:\CRF4\04102007\K731875.raw

4 <110> APPLICANT: Khvorova, Anastasia  
 5 Reynolds, Angela  
 6 Leake, Devin  
 7 Marshall, William  
 8 Read, Steven  
 9 Scaringe, Stephen  
 11 <120> TITLE OF INVENTION: siRNA Targeting Vacuolar ATPase  
 14 <130> FILE REFERENCE: Dharmacon 2100-US11  
 C--> 16 <140> CURRENT APPLICATION NUMBER: US/11/731,875  
 C--> 17 <141> CURRENT FILING DATE: 2007-03-30  
 19 <150> PRIOR APPLICATION NUMBER: US 10/714,333  
 20 <151> PRIOR FILING DATE: 2003-11-14  
 22 <150> PRIOR APPLICATION NUMBER: US 60/426,137  
 23 <151> PRIOR FILING DATE: 2002-11-14  
 25 <150> PRIOR APPLICATION NUMBER: US 60/502,050  
 26 <151> PRIOR FILING DATE: 2003-09-10  
 28 <150> PRIOR APPLICATION NUMBER: US 10/940,892  
 29 <151> PRIOR FILING DATE: 2004-09-14  
 31 <150> PRIOR APPLICATION NUMBER: PCT/US04/14885  
 32 <151> PRIOR FILING DATE: 2004-05-12  
 34 <160> NUMBER OF SEQ ID NOS: 634  
 36 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 38 <210> SEQ ID NO: 1  
 39 <211> LENGTH: 19  
 40 <212> TYPE: RNA  
 41 <213> ORGANISM: Artificial Sequence  
 43 <220> FEATURE:  
 44 <223> OTHER INFORMATION: Synthetic  
 47 <220> FEATURE:  
 48 <221> NAME/KEY: misc\_feature  
 49 <222> LOCATION: (1)...(2)  
 50 <223> OTHER INFORMATION: n is any nucleotide  
 52 <220> FEATURE:  
 53 <221> NAME/KEY: misc\_feature  
 54 <222> LOCATION: 4  
 55 <223> OTHER INFORMATION: n is any nucleotide  
 57 <220> FEATURE:  
 58 <221> NAME/KEY: misc\_feature  
 59 <222> LOCATION: (6)...(9)  
 60 <223> OTHER INFORMATION: n is any nucleotide  
 62 <220> FEATURE:  
 63 <221> NAME/KEY: misc\_feature  
 64 <222> LOCATION: 12

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65 <223> OTHER INFORMATION: n is any nucleotide
68 <220> FEATURE:
69 <221> NAME/KEY: misc_feature
70 <222> LOCATION: (15)...(18)
71 <223> OTHER INFORMATION: n is any nucleotide
73 <400> SEQUENCE: 1
W--> 74 nnanannnnnu cnaannnna 19
76 <210> SEQ ID NO: 2
77 <211> LENGTH: 19
78 <212> TYPE: RNA
79 <213> ORGANISM: Artificial Sequence
81 <220> FEATURE:
82 <223> OTHER INFORMATION: Synthetic
85 <220> FEATURE:
86 <221> NAME/KEY: misc_feature
87 <222> LOCATION: 1, 2, 4, 6-9, 12, 15-18
88 <223> OTHER INFORMATION: n is any nucleotide
90 <400> SEQUENCE: 2
W--> 91 nnanannnnnu gnaannnna 19
93 <210> SEQ ID NO: 3
94 <211> LENGTH: 19
95 <212> TYPE: RNA
96 <213> ORGANISM: Artificial Sequence
98 <220> FEATURE:
99 <223> OTHER INFORMATION: Synthetic
102 <220> FEATURE:
103 <221> NAME/KEY: misc_feature
104 <222> LOCATION: 1,2, 4, 6 - 9, 12, 15-18
105 <223> OTHER INFORMATION: n is any nucleotide
107 <400> SEQUENCE: 3
W--> 108 nnanannnnnu unaannnna 19
110 <210> SEQ ID NO: 4
111 <211> LENGTH: 19
112 <212> TYPE: RNA
113 <213> ORGANISM: Artificial Sequence
115 <220> FEATURE:
116 <223> OTHER INFORMATION: Synthetic
119 <220> FEATURE:
120 <221> NAME/KEY: misc_feature
121 <222> LOCATION: 1, 2, 4, 6-9, 12, 15 -18
122 <223> OTHER INFORMATION: n is any nucleotide
124 <400> SEQUENCE: 4
W--> 125 nnanannnnnu cncannnna 19
127 <210> SEQ ID NO: 5
128 <211> LENGTH: 19
129 <212> TYPE: RNA
130 <213> ORGANISM: Artificial Sequence
132 <220> FEATURE:
133 <223> OTHER INFORMATION: Synthetic

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136 <220> FEATURE:
137 <221> NAME/KEY: misc_feature
138 <222> LOCATION: 1, 2, 4, 6-9, 12, 15-18
139 <223> OTHER INFORMATION: n is any nucleotide
141 <400> SEQUENCE: 5
W--> 142 nnanannnnnu gncannnna 19
144 <210> SEQ ID NO: 6
145 <211> LENGTH: 19
146 <212> TYPE: RNA
147 <213> ORGANISM: Artificial Sequence
149 <220> FEATURE:
150 <223> OTHER INFORMATION: Synthetic
153 <220> FEATURE:
154 <221> NAME/KEY: misc_feature
155 <222> LOCATION: 1,2, 4, 6-9, 12, 15-18
156 <223> OTHER INFORMATION: n is any nucleotide
158 <400> SEQUENCE: 6
W--> 159 nnanannnnnu uncannnna 19
161 <210> SEQ ID NO: 7
162 <211> LENGTH: 19
163 <212> TYPE: RNA
164 <213> ORGANISM: Artificial Sequence
166 <220> FEATURE:
167 <223> OTHER INFORMATION: Synthetic
170 <220> FEATURE:
171 <221> NAME/KEY: misc_feature
172 <222> LOCATION: 1, 2, 4, 6-9, 12, 15 -18
173 <223> OTHER INFORMATION: n is any nucleotide
175 <400> SEQUENCE: 7
W--> 176 nnanannnnnu cnuannnna 19
178 <210> SEQ ID NO: 8
179 <211> LENGTH: 19
180 <212> TYPE: RNA
181 <213> ORGANISM: Artificial Sequence
183 <220> FEATURE:
184 <223> OTHER INFORMATION: Synthetic
187 <220> FEATURE:
188 <221> NAME/KEY: misc_feature
189 <222> LOCATION: 1, 2, 4, 6-9, 12, 15-18
190 <223> OTHER INFORMATION: n is any nucleotide
192 <400> SEQUENCE: 8
W--> 193 nnanannnnnu gnuannnna 19
195 <210> SEQ ID NO: 9
196 <211> LENGTH: 19
197 <212> TYPE: RNA
198 <213> ORGANISM: Artificial Sequence
200 <220> FEATURE:
201 <223> OTHER INFORMATION: Synthetic
204 <220> FEATURE:

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205 <221> NAME/KEY: misc_feature
206 <222> LOCATION: 1, 2, 4, 6-9, 12, 15-18
207 <223> OTHER INFORMATION: n is any nucleotide
209 <400> SEQUENCE: 9
W--> 210 nnanannnnnu unuannnna 19
212 <210> SEQ ID NO: 10
213 <211> LENGTH: 19
214 <212> TYPE: RNA
215 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Synthetic
221 <220> FEATURE:
222 <221> NAME/KEY: misc_feature
223 <222> LOCATION: 1, 2, 4, 6-9, 12, 15-18
224 <223> OTHER INFORMATION: n is any nucleotide
226 <400> SEQUENCE: 10
W--> 227 nnancnnnnnu cnaannnna 19
229 <210> SEQ ID NO: 11
230 <211> LENGTH: 19
231 <212> TYPE: RNA
232 <213> ORGANISM: Artificial Sequence
234 <220> FEATURE:
235 <223> OTHER INFORMATION: Synthetic
238 <220> FEATURE:
239 <221> NAME/KEY: misc_feature
240 <222> LOCATION: 1,2, 4, 6-9, 12, 15-18
241 <223> OTHER INFORMATION: n is any nucleotide
243 <400> SEQUENCE: 11
W--> 244 nnancnnnnnu gnaannnna 19
246 <210> SEQ ID NO: 12
247 <211> LENGTH: 19
248 <212> TYPE: RNA
249 <213> ORGANISM: Artificial Sequence
251 <220> FEATURE:
252 <223> OTHER INFORMATION: Synthetic
255 <220> FEATURE:
256 <221> NAME/KEY: misc_feature
257 <222> LOCATION: 1, 2, 4, 6-9, 12, 15-18
258 <223> OTHER INFORMATION: n is any nucleotide
260 <400> SEQUENCE: 12
W--> 261 nnancnnnnnu unaannnna 19
263 <210> SEQ ID NO: 13
264 <211> LENGTH: 19
265 <212> TYPE: RNA
266 <213> ORGANISM: Artificial Sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: Synthetic
272 <220> FEATURE:
273 <221> NAME/KEY: misc_feature

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274 <222> LOCATION: 1, 2, 4, 6-9, 12, 15-18
275 <223> OTHER INFORMATION: n is any nucleotide
277 <400> SEQUENCE: 13
W--> 278 nnancnnnnu cncannna 19
280 <210> SEQ ID NO: 14
281 <211> LENGTH: 19
282 <212> TYPE: RNA
283 <213> ORGANISM: Artificial Sequence
285 <220> FEATURE:
286 <223> OTHER INFORMATION: Synthetic
289 <220> FEATURE:
290 <221> NAME/KEY: misc_feature
291 <222> LOCATION: 1, 2, 4, 6-9, 12, 15-18
292 <223> OTHER INFORMATION: n is any nucleotide
294 <400> SEQUENCE: 14
W--> 295 nnancnnnnu gncannna 19
297 <210> SEQ ID NO: 15
298 <211> LENGTH: 19
299 <212> TYPE: RNA
300 <213> ORGANISM: Artificial Sequence
302 <220> FEATURE:
303 <223> OTHER INFORMATION: Synthetic
306 <220> FEATURE:
307 <221> NAME/KEY: misc_feature
308 <222> LOCATION: 1, 2, 4, 6-9, 12-15, 18
309 <223> OTHER INFORMATION: n is any nucleotide
311 <400> SEQUENCE: 15
W--> 312 nnancnnnnu uncannna 19
314 <210> SEQ ID NO: 16
315 <211> LENGTH: 19
316 <212> TYPE: RNA
317 <213> ORGANISM: Artificial Sequence
319 <220> FEATURE:
320 <223> OTHER INFORMATION: Synthetic
323 <220> FEATURE:
324 <221> NAME/KEY: misc_feature
325 <222> LOCATION: 1, 2, 4, 6-9, 12, 15-18
326 <223> OTHER INFORMATION: n is any nucleotide
328 <400> SEQUENCE: 16
W--> 329 nnancnnnnu cnuannna 19
331 <210> SEQ ID NO: 17
332 <211> LENGTH: 19
333 <212> TYPE: RNA
334 <213> ORGANISM: Artificial Sequence
336 <220> FEATURE:
337 <223> OTHER INFORMATION: Synthetic
340 <220> FEATURE:
341 <221> NAME/KEY: misc_feature
342 <222> LOCATION: 1, 2, 4, 6-9, 12, 15-18

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/11/731,875

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Input Set : F:\DHARMA\_2100-US11\_CRF.TXT  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:2; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:3; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:4; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:5; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:6; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:7; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:8; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:9; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:10; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:11; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:12; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:13; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:14; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:15; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:16; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:17; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:18; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:19; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:20; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:21; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:22; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:23; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:24; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:25; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:26; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18  
Seq#:27; N Pos. 1,2,4,6,7,8,9,10,12,15,16,17,18  
Seq#:28; N Pos. 4,5,7,9,10,11,12,15,18,19,20,21

## VERIFICATION SUMMARY

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Input Set : F:\DHARMA\_2100-US11\_CRF.TXT

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L:16 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:74 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
L:91 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
L:108 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0  
L:125 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
L:142 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
L:159 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0  
L:193 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:210 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0  
L:227 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0  
L:244 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0  
L:261 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0  
L:278 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0  
L:295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0  
L:312 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0  
L:329 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0  
L:346 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0  
L:364 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0  
L:381 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
L:398 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0  
L:415 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0  
L:432 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0  
L:449 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0  
L:466 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0  
L:484 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0  
L:501 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0  
L:518 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0  
L:535 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0